# Air Quality Conformity Task Force Summary Meeting Notes February 28, 2013

Participants:

Dick Fahey – Caltrans Stew Sonnenberg - FHWA Mike Brady – Caltrans Ginger Vagenas – EPA Jeff Buss – EPA Lynn McIntyre – URS Jennifer Schulte – URS Gary Sidhu – ACTC Glenn Kinoshita – Caltrans Hossein Khodabakhsh - Caltrans Matt Bomberg – Alameda CTC Carolyn Clevenger – MTC Brenda Dix – MTC Stefanie Hom – MTC Harold Brazil – MTC Sri Srinivasan – MTC Adam Crenshaw – MTC

**1. Welcome and Self Introductions**: Brenda Dix (MTC) called the meeting to order at 9:30 am. See attendance roster above. Ted Matley (FTA) was not in attendance and would provide comments through email.

## 2. PM<sub>2.5</sub> Interagency Consultations

- a. PM<sub>2.5</sub> Conformity Exempt List Review
- i. City of San Mateo: SR-92/El Camino Real (SR-82) Ramp Modifications

Hossein Khodabakhsh (Caltrans) provided an overview of the project. The project proposes to modify a four quadrant cloverleaf into a two quadrant partial cloverleaf to improve traffic operations of the 92/82 interchange and increase the performance of the on and off ramps which are currently creating secondary operational deficiencies on the SR-92 mainline. The SM 92/82 interchange serves as a major access point from Route 92 to commercial and residential areas on the El Camino Real (Route 82) in downtown San Mateo.

Glenn Kinoshita (Caltrans) added that the truck percentages are predicted to remain constant. The project is an operational improvement only and does not increase capacity on the mainline. It is intended to reduce congestion on El Camino Real. There will not be a significant number of diesel trucks that will use the intersections because trucks have other ways to get to El Camino Real.

Brenda Dix (MTC) indicated that there would be no change in AADT between the build and no-build scenarios. Truck volume numbers look low.

Mike Brady (MTC) indicated that this project does not change in the number of lanes going on and off the freeway, it just includes ramp channelization. The project is not a problem to start with because it is not changing the capacity and how it will affect the freeway, it is just operational.

Ginger Vagenas (EPA) added that this project is not a project of air quality concern.

Dick Fahey (Caltrans) indicated that this project is not a project of air quality concern.

Stew Sonnenberg (FHWA) indicated that this project is not a project of air quality concern.

On February, 28, 2013, Ted Matley (FTA), via email, indicated that this project is not a project of air quality concern.

The Task Force had a concurrent discussion about the methodology for the truck numbers used in the analysis.

On February 20, 2013, Ginger Vagenas (EPA) emailed the Task Force the following:

"I just looked at the El Camino interchange project and noticed that the sponsor relies on the numbers of 3-axle vehicles as the basis for total diesel numbers in the project forms. While we understand that including all 2-axle trucks would inflate the numbers for diesel truck, ignoring them altogether biases the numbers in the other direction. There needs to be a way to somehow ensure the 2-axle diesels are included – maybe a conversion factor?? I am not sure if this would have to be done on a county level basis, or if there is a way of doing it for the entire Bay Area (as well as other areas throughout CA) but we do need a way to include all the diesel trucks in the analysis. "

On February 20, 2013, Mike Brady (Caltrans) emailed the Task Force the following:

"Based on what EPA has said in the past, we clearly can't rely on 3-axle diesel trucks. 2-axle must be included. One possibility might be to use the diesel/gas proportion of LHD-MHD trucks from EMFAC and apply that to the 2-axle numbers? I know this has been discussed before but don't remember the results right now."

On February 21, 2013, Brenda Dix (MTC) emailed the Task Force following:

"The last time this issue was raised we ended up waiving it aside since the overall AADT was very low at the project site. For the project in question we will work with the project sponsor to develop a ratio for them to apply to the counts that they have based on the EMFAC fleet mix for San Mateo county."

On February 27, 2013, Brenda emailed the Task Force revised truck numbers and indicated the following:

"MTC's air quality modeler, Harold Brazil, was able to extract details on the truck fleet mix in San Mateo county from EMFAC in order to apply ratios to the 3-axle counts to extrapolate out to the total number of both gas and diesel trucks in the project corridor. The revised numbers are included in the attached project assessment form. Note that the rows in the new truck tables match the order of the rows in the original tables even though they are not fully labeled. This revised information will be posted to the online agenda as well."

On February 27, 2013, Ginger emailed the Task Force the following:

"Assuming all the task force members are comfortable with this approach, I think the next steps would be for MTC to document its process so we could take it to OTAQ for review. Because this issue has come up in the past and will no doubt come up again, it seems like a good idea to have an agreed-upon approach to determining diesel truck traffic that could be shared with project sponsors."

At the meeting, Harold Brazil (MTC) indicated that MTC addressed the omission of diesel trucks less-than 3-axles by looking at vehicle fleet population numbers in EMFAC 2011 for the County of San Mateo in the years 2018 and 2035 (the last year in EMFAC2011). They developed ratios (the year 2035 EMFAC2011 numbers were used for 2038 the horizon year of the project) to apply to the Caltrans truck counts to extrapolate them to obtain the complete number of diesel trucks in the project area. A set of assumptions regarding the conversion between truck weight classes in EMFAC and the Caltrans axle counts had to be developed.

Brenda indicated that MTC will develop a complete write-up on the process to vet with the Task Force and to allow other project sponsors to use the methodology when required for their project. MTC will post it on their Air Quality Conformity Task Force page when it is available.

Mike suggested that MTC should circulate the reference document beyond the Task Force. This discussion has happened before in other regions since EMFAC defines vehicles by weight and everywhere else defines by axles. There does need to be a way to adjust between those two classifications, but there is not a universal methodology yet.

Ginger indicated that she supports creating a reference document to allow project sponsors to calculate truck counts that include less-than 3-axle trucks. This issue is something that applies more widely than just the Bay Area. She would like to involve OTAQ in the internal review of the document before it is posted.

Brenda indicated that she will provide the reference document for internal review, and then put it on the March Air Quality Conformity Task Force meeting agenda for discussion.

*Final Determination:* FHWA, Caltrans, EPA, FTA, and MTC concurred that the project is exempt from PM2.5 project level analysis. MTC will provide a document on the methodology for including diesel trucks that are less than 3-axels in truck counts for the Task Force to review, and then make it available on the MTC Air Quality Conformity Task Force webpage for other project sponsors to use.

ii. Alameda County Transportation Commission (ACTC): I-580 HOT Corridor Project

Gary Sidhu (ACTC) provided an overview of the project. Caltrans and the Alameda County Transportation Commission (ACTC) propose to convert the proposed single high occupancy vehicle (HOV) lane on westbound I-580 to a single high occupancy toll (HOT) lane. The HOT lane would be restricted to HOVs (which include automobiles with two or more persons, buses, and motorcycles) and vehicles that pay a toll. The project limits are from west of Greenville Road undercrossing to just east of the San Ramon Road/Foothill Road overcrossing in eastern Alameda County. The total length of the project is approximately 13.7 miles. The proposed HOT lane would not require any roadway expansion, placement of additional pavement, or

acquisition of right-of-way. The HOT lane would use the same striping and alignment as the HOV lane. Tolling equipment and signage would be installed, and trenching along the outside edge of pavement would occur for installation of conduits. Construction of the westbound HOV lane and conversion to a HOT lane will be simultaneous, to allow the facility to open to traffic as a HOT lane. Consultation with the Air Quality Conformity Task Force was complete in February 2012 for the westbound HOV lane project. The project was found to reduce  $PM_{2.5}$  emissions in both 2015 and 2035. The HOT lane would improve the overall level of service compared with the HOV lane (No Build condition) and is expected to further reduce  $PM_{2.5}$  emissions.

Lynn McIntyre (URS) added that the single HOT lane would not allow for a significant increase in diesel vehicles. The majority of diesel trucks are restricted from using HOV lanes, even for passing. The estimated increase compared with the No Build condition is 4.3 percent in 2015 and 6.9 percent in 2035. This is not considered a significant increase. The project sponsor is looking for Task Force determination quickly so they can start construction. They have already prepared the proposed methodology for a  $PM_{2.5}$  hot spot analysis to review if this project is found to be a project of air quality concern.

Mike Brady (Caltrans) asked what the difference is between an HOV and HOT lane.

Lynn responded that any regular vehicle with two or more occupants, electric vehicles (EVs), and busses can use HOV lanes. HOT lanes allow single-occupant vehicles to use the lanes by paying a toll.

Mike asked what the difference in volumes and speeds will be between the HOT and HOV lane.

Lynn indicated that they do not have that data at the moment. But data from other projects suggest that the HOV lane in the no-build scenario may have slightly higher operational function. But with HOV lane only, the mixed flow lanes will operate at a much worse level of service (LOS). With the HOT conversion, the mixed flow lanes improve. In the overall corridor, there would be no increases in speed in the HOT lane compared with the HOV lane.

Carolyn Clevenger (MTC) asked if the no-build scenario includes the HOV lane.

Lynn responded that the no-build scenario does include the HOV lane. It assumes the conversion to the HOT lane would not occur.

Stew Sonnenberg (FHWA) asked if the HOT lane will operate on peak hours.

Gary responded that the HOT lane will operate the same hours as the current HOV lane, which are peak hours.

Stew asked if the peak hours are 5:00 to 10:00 am and 3:00 to 7:00 pm, Monday through Friday.

Gary confirmed that those are the peak hours for the HOV lane.

Dick Fahey (Caltrans) asked if the no-build scenario includes last year's HOV AADT project numbers.

Lynn responded that they are not exactly the same numbers because there has been an updated traffic forecast and analysis. The no-build scenario includes the HOV lane.

Dick asked if the increase in AADT would be from the additional throughput.

Lynn confirmed that it would be. The AADT numbers were based on the data for the peak AM hours, which is the worst-case for that corridor.

Ginger Vagenas (EPA) indicated that she considers this a project of air quality concern because AADT would increase. Some of the increases in the project are significant. The impact may not be that significant, but it is not clear the project assessment form.

Mike indicated that there needs to be a quantitative screening step. He was on the fence about whether the project is a project of air quality concern. The project assessment form indicates that will be an increase of traffic and trucks. The project sponsor could do a more detailed traffic analysis as an interim step between the project assessment form and a hot spot analysis.

Jeff Buss (EPA) questioned if the AADT increase is significant. Most of the increase is for 2015. Some of the impacts could be mitigated. Fleet turnover could be a factor. He is not that concerned about the increase in AADT in the future because of fleet turnover, but if there is congestion in the immediate future, fleet turnover would not make that much of an impact. He was leaning toward considering this project a project of air quality concern.

Lynn indicated that the truck AADT shown on the project assessment form is a percentage of total truck AADT, since the numbers are for the AM peak only.

Mike indicated that the project is probably not a project of air quality concern, but he cannot justify it with just the data on the project assessment form. There is not enough information. He would like to see truck volumes by time of day and speed data in addition to just the truck percentages included in the form.

Lynn indicated that they will try to provide more information on the project.

Harold Brazil (MTC) indicated that speed data would be helpful to include.

Dick indicated that the project sponsor could look at doing 24-hour modeling, not just for the peak hour. There may not be such a large increase in AADT.

Brenda indicated that the project sponsor will pull together additional information about the project and then circulate it to the Task Force via email.

*Final Determination:* FHWA, Caltrans, EPA, FTA, and MTC concluded there was not enough information to make a determination. The project sponsor will provide more information to the Task Force via email.

#### b. Consultation on Hot Spot Analysis Methodology

i. Alameda County Transportation Commission (ACTC): I-580 HOT Corridor Project

No discussion required. See above.

### c. Confirm Projects are Exempt from PM2.5 Conformity

Stew Sonnenberg (FHWA) asked if CC-110090, Contra Costa Blvd. Improvements, is considered a safety project, even though it includes the construction of a bike lane.

Brenda Dix (MTC) indicated that the project is receiving HSIP funding, so it is considered a safety project.

Dick Fahey (Caltrans) indicated that ALA-110119, AC Transit Spectrum Ridership Growth, sounds like it would increase ridership and questioned the use of the "planning study" exemption code for the project.

Sri Srinivasan (MTC) indicated that MTC did not know which exemption code to use for this project.

Dick indicated that he did not have any suggestions on alternate exemption codes that could be used.

Mike Brady (Caltrans) agreed that there was no other appropriate exemption code to use instead.

Brenda indicated that they would leave the exemption code for ALA-110119 as-is.

On February 28, 2013, Ted Matley (FTA), via email, indicated that he did not have any comments on the exempt list.

*Final Determination:* FHWA, Caltrans, EPA, FTA, and MTC concurred that all projects on the exempt list are exempt from PM2.5 project level analysis.

#### 3. Consent Calendar

- a. January 24, 2013 Air Quality Conformity Task Force Meeting Summary
- b. SR-85 Express Lanes (SCL090030) Project Change

There were no comments on the consent calendar.

*Final Determination:* FHWA, Caltrans, EPA, FTA, and MTC concurred that all items on the consent calendar are approved.

#### 4. Other Items

Brenda Dix (MTC) indicated that the use of EMFAC2011 has been approved by EPA.

Mike Brady (Caltrans) indicated that the statewide California Air Quality meeting is scheduled for Wednesday, March 13, 2013 from 10:00 am to 1:00 pm.

Brenda adjourned the meeting at approximately 10:20 am. The next Air Quality Conformity Task Force meeting is scheduled for Thursday, March 28, 2013 at 9:30 am.